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WHAT IS CLAIMED IS:

1. A temperature regulator that adjusts a temperature of an X-ray detector, comprising:

a controller;

a thermal sensor reporting temperature data to the controller; and

a thermo-electric device having a positive voltage contact and a negative voltage contact that responds to the controller being in receipt of the temperature data from the thermal sensor.

2. The apparatus of claim 1, further comprising:

a switch that switches the positive voltage contact and the negative voltage contact.

3. The apparatus of claim 1, wherein the thermal sensor is a thermocouple

4. The apparatus of claim 1, wherein the thermal sensor is in contact with an X-ray panel.

5. The apparatus of claim 1, further comprising:

a voltage source connected to the positive voltage contact and the negative voltage contract.

6. The apparatus of claim 1, wherein the thermo-electric device is a solid state thermo-electric device.

7. The apparatus of claim 1, further comprising:

a switch that controls current direction at the positive voltage contact controlled by the controller in response to receipt of temperature data.

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8. The apparatus of claim 1, where the thermo-electric device responds to the control to maintain an X-ray panel in the X-ray detector within a predetermined temperature range.

9. The apparatus of claim 8, wherein the predetermined temperature range is twenty-five to thirty-five degrees Celsius.

10. A method for regulating device temperature, the method comprising the steps of:

measuring a device temperature;

determining if the device temperature is within a predetermined operational range; and

adjusting a current that enters a thermo-electric device in order to change the device temperature.

11. The method of claim 10, further comprising the steps of:

identifying a mode of temperature control the device requires; and

changing polarity of a voltage entering the thermo-electric device in response to the mode of temperature control.

12. The method of claim 11, wherein the step of changing further comprises the step of;

switching the voltage with an electromagnetic switch that responds to the controller.

13. The method of claim 10, where measuring further comprise:

sending data from a thermocouple to the controller.

14. The method of claim 10, wherein the thermo-electric device is a solid-state thermo-electric device.

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15. The method of claim 10, wherein the predetermined operating range is twenty-five to thirty-five degrees Celsius.

16. A system that adjusts a temperature in a X-ray detector, the system comprising:

a controller;

a thermal sensor reporting temperature data to the controller;

a thermo-electric device having a positive voltage contact and a negative voltage contact that responds to the controller being in receipt of the temperature data from the thermal sensor; and

an external cooling device that removes thermal energy from the thermo-electric device

17. The apparatus of claim 16, further comprising:

a switch that switches the positive voltage contact and the negative voltage contact.

18. The apparatus of claim 16, wherein the thermal sensor is a thermocouple.

19. The apparatus of claim 16, wherein the thermal sensor is a solid-state thermal sensor.

20. The apparatus of claim 16, wherein the thermal sensor is in contact with an X-ray panel.

21. The apparatus of claim 16, further comprising:

a voltage source connected to the positive voltage contact and the negative voltage contract.

22. The apparatus of claim 16, wherein the thermo-electric device is a solid-state thermo-electric device.

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23. The apparatus of claim 16, wherein the external cooling device is a liquid cooling device.

24. The apparatus of claim 16, where the external cooling device is located more tan three meters from the thermo-electrical device.